Plant Parts and Functions

Review of Roots
Segment One – Flowers
Segment Two – Fruits
Review—Roots

Functions of Roots

- to absorb nutrients and water
- to anchor the plant in the soil
- to serve as food storage organs
Roots Review

taproot

fibrous root
Roots Review

Tree roots extend beyond drip line.
Most roots occur in top 12” of soil.
Parts of a Root

- root hairs
- zone of maturation
- zone of elongation
- meristematic zone
- root cap
Roots as Food Crops

Sweet potato
Carrot
Parsnip
Salsify
Radish
Segment One – Flowers
Parts of a Flower
Dioecious and Monoecious Plants

Dioecious Plants
- Staminate plants bear only male flowers
- Pistillate plants bear only female flowers

Monoecious Plants
- Flowers that contain both male and female parts
How Seeds Form
Types of Flowers

Solitary flower – one flower per stem

Inflorescence – cluster of flowers
Segment Two – Fruits
### Parts of a Fruit

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Represents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeds</td>
<td>mature ovule</td>
<td>both parents</td>
</tr>
<tr>
<td>Ovary wall</td>
<td>fleshy or dry</td>
<td>maternal plant</td>
</tr>
</tbody>
</table>
Types of Fruit

- Pome
- Drupe
- Aggregate
- Cone
- Multiple
Parts of a Seed

- Embryo
- Endosperm
- Seed coat
Review

Plant Parts and Functions, Parts Three & Four

- Segment One - Roots
- Segment Two – Flowers
- Segment Three – Fruit
Review – Functions of Roots

- to absorb nutrients and water
- to anchor the plant in the soil
- to serve as food storage organs
Review – Parts of a Flower

Pistil (female)
- ovary
- style
- stigma

Stamen (male)
- filament
- anther
Review – Definition of Fruit

Fruits consist of:

- fertilized and mature ovules (seeds)
- ovary wall
  - fleshy as in the apple or
  - dry and hard as in maple fruit (samara).
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